

The logo for TEMAK, featuring the word "TEMAK" in a bold, red, sans-serif font with a registered trademark symbol. Below the text are three horizontal blue wavy lines.

02 #

december 2015

news edition

all together

www.temak.gr

CEO's Message



Projects

COMPLETED
WITHIN 2015



International Standards Certifications

OHSAS 18001



Topic

CORPORATE SOCIAL
RESPONSIBILITY



TEMAK MED

Modern Medical Water Treatment Systems



For a Happy and Prosperous New Year

Simultaneously it is a period of **reflection, consideration and planning** for all of us, as individuals, members of families, businesses, for our state etc. in our finances as well as in other fields, the most important ones, those related to the values of humanism, virtue, morality, solidarity.

Let's take a look at 2015 and measure what we achieved.

Praise ourselves for our accomplishments and record our weaknesses and shortcomings.

Envision and design the year 2016 in our finances, in our work, in our family.

Clarify what we really want!!!

Manage our weaknesses, fill in our deficiencies and make the most of our virtues.

Cultivate peace and balance in our soul and pass it to those around us.

Love ourselves, so as to give meaning to «love thy neighbor as thyself».

Happy Holidays!

Happy and Creative the year 2016 for you, your families and the entire world.

Herodes Mitsopoulos
CEO



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CORPORATE SOCIAL
RESPONSIBILITY



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Indicative desalination plants in 2015

Desalination plant in Hydra: 1 800 m³/day of drinking water. System designed for sea water with TDS=42,000ppm

TEMAK desalination plant in Hydra, with production capacity 1,800 m³/day, has successfully operated for about 16 months from its launch. To be exact, the system so far has produced about 637,990 m³ of drinking water.

The significance of this project lies not only in the technically impeccable construction, nor in the project size, nor in the 12 years duration of the contract between TEMAK and the Municipality, but mainly with the multiple benefits enjoyed by the quality of water produced by the desalination plant. Life on the island has changed. Residents have fully recognized the importance of the project, since they themselves admit that the superior water quality has improved the quality of their lives. The water flowing in taps of each house is drinkable. Problems encountered with the scaling that used to damage the piping, the equipment and the fittings of the house and disrupt everyday life, no longer exist. The plants in the garden are completely different. Hydra is a living example to what we always claim that Water Quality = Quality of Life!

Country	Greece
Client	Hydra Municipality
Daily capacity	1,800 m ³
Feed water	Sea water (up to 42,000 ppm)
Product water quality	Drinking



Desalination in Antiparos: 600m³/day of drinking water. System designed for sea water with TDS=42,000ppm

The desalination plant in Antiparos became fully operational in July 2015. The capacity of the plant is 600 m³/day (2x300m³/day). The desalination plant produces drinking water and feeds the 400 m³ reservoir of the island, which supplies water to the town of Antiparos.

Country	Greece
Client	Antiparos Municipality
Daily capacity	600 m ³
Feed water	Sea water (up to 42,000 ppm)
Product water quality	Drinking



Pserimos: 10m³/day of drinking water from sea water treatment powered by solar energy

In March 2015 TEMAK delivered a desalination plant in Pserimos. The plant was designed with an integrated energy recovery device in order to consume the least possible electricity and can be environmentally friendly, and was installed in the island of Pserimos with the purpose to cover the water needs of the existing buildings.

Country	Greece
Client	Island of Pserimos
Daily capacity	10 m³
Feed water	Sea water
Product water quality	Drinking



South Aegean Region, Ro Megistis: 20m³/day of drinking water from sea water treatment powered by solar energy

Through a tender, TEMAK was awarded the supply and installation of an autonomous capacity desalination system producing 20m³/day on the island of Ro Megistis. The system was designed and constructed with an energy recovery device in order to lower the energy consumption to meet the island's drinking water supply, which until today was covered by transporting water from the inland.

Country	Greece
Client	Island of Ro
Daily capacity	20 m³
Feed water	Sea water
Product water quality	Drinking



Gavdos: 80m³/day of potable water from brackish water treatment

In April 2015 a containerized, brackish water desalination plant, was delivered and installed in the island of Gavdos. The system produces a minimum of 80 m³/day water, covering in this way the water needs of Gavdos

Country	Greece
Client	Island of Gavdos
Daily capacity	80 m ³
Feed water	Brackish
Product water quality	Drinking



ALBRAU Romania: 1,200 m³/ day water of specific requirements for beer production, from processing heavy brackish water

For the largest brewery in Romania, ALBRAU a heavy brackish reverse osmosis system was designed and manufactured, using well water to meet the needs of production. The unit produces a total of 50m³/h (1,200 m³/day) of water with very low hardness and low pH. The process is fully automatic and the system was installed in the brewery area.

Country	Romania
Client	ALBRAU
Daily capacity	1,200 m ³
Feed water	Heavy Brackish
Product water quality	Suitable for brewing



Algeria: 360m³/day water for boilers, from brackish water treatment

In October 2014 our partner in Tunisia ordered a brackish water treatment system (TDS <2,000ppm) for a dairy factory in Algeria. The osmosis produces 15m³/h water, which are further treated by a softening system to completely remove the hardness, in order for the water to be used by the factory's pressure boilers.

Country	Algeria
Daily capacity	360 m³
Feed water	Brackish
Product water quality	TH<2ppm CaCO₃



Resort in Egypt: 100m³/day drinking water from sea water treatment

TEMAK manufactured and delivered a sea water reverse osmosis system for a new resort in Ras El Hekma, Egypt. The plant provides for the entire resort, water for drinking purposes as well as for general use, according to WHO standards. The reverse osmosis produces 4.4m³/h of water which undergoes post-treatment with re-hardening filters in order to become tastier, healthier and less corrosive. The plant was successfully installed in September 2015.

Since the water supply to the resort was secured at a very economical way (~ 0.6€/m³), it is no longer necessary to purchase water from the network, thus resulting in large savings for the client.

Country of Installation	Egypt
Daily capacity	100 m³
Feed water	Sea Water
Product water quality	Potable Water Standards according to WHO



Antanarivo, Madagascar: 50m³/day water for a fish farm from sea water treatment

In June 2015 we delivered a seawater treatment system for a fish farm located in the capital of Madagascar, Antanarivo. This is the first TEMAK system installed in this country. The osmosis produces drinking water quality according to WHO standards. The interesting is that the customer chose to order from TEMAK, after traveling in Greece, where he saw in place and in operation a TEMAK desalination system, thus confirming that the satisfied clients are our best advertisement.

Country	Madagascar
Daily capacity	50 m³
Feed water	Sea water
Product water quality	Drinking according to WHO



Oman: Central RO unit for the supply of 230m³/day of purified water at a new clinic

In September 2015, the supply of a brackish water RO unit for a new clinic in Oman was awarded to our partner. The plant will produce 230m³/day of purified water with TDS < 30mg/l and will serve the central supply to the entire clinic, as well as being the pre-treatment to the water treatment plant for the renal dialysis beds.

Country	Oman
Client	Ministry of Health
Daily Capacity	230 m³
Raw Water	Muscat Municipal Network (< 500mg/l)
Product water quality	< 30 mg/l



Oman: Containerized mobile units

In June 2015 our partner in Oman, ordered two sea water containerized systems capable of treating raw feed water up to 42,000ppm. The plants were manufactured according to the stringent specifications set by the Ministry of Defense with the purpose to supply 20cmpd and 30cmpd of drinking water respectively, according to Omani standards. The containers have been manufactured and tested electrically and hydraulically in TEMAK factory during the month of December by the delegates of the MOD.

Country	Oman
End User	Ministry
ABU TABUL	
Daily Capacity	20 m³
Raw Water	41,000 ppm
Product water quality	Potable water according to Omani Standards
Μονάδα Νο2	
Daily Capacity	30 m³
Raw Water	19,740 ppm
Product water quality	Potable water according to Omani Standards



Oman: 500m³/day drinking water

In April 2014 we delivered our first water treatment system to a Ministry in Oman, a containerized brackish reverse Osmosis system producing 500m³day of water suitable for drinking purposes according to Omani Standards. The plant was successfully commissioned in July 2015 at an isolated camp to cover the needs of the Ministry's personnel.

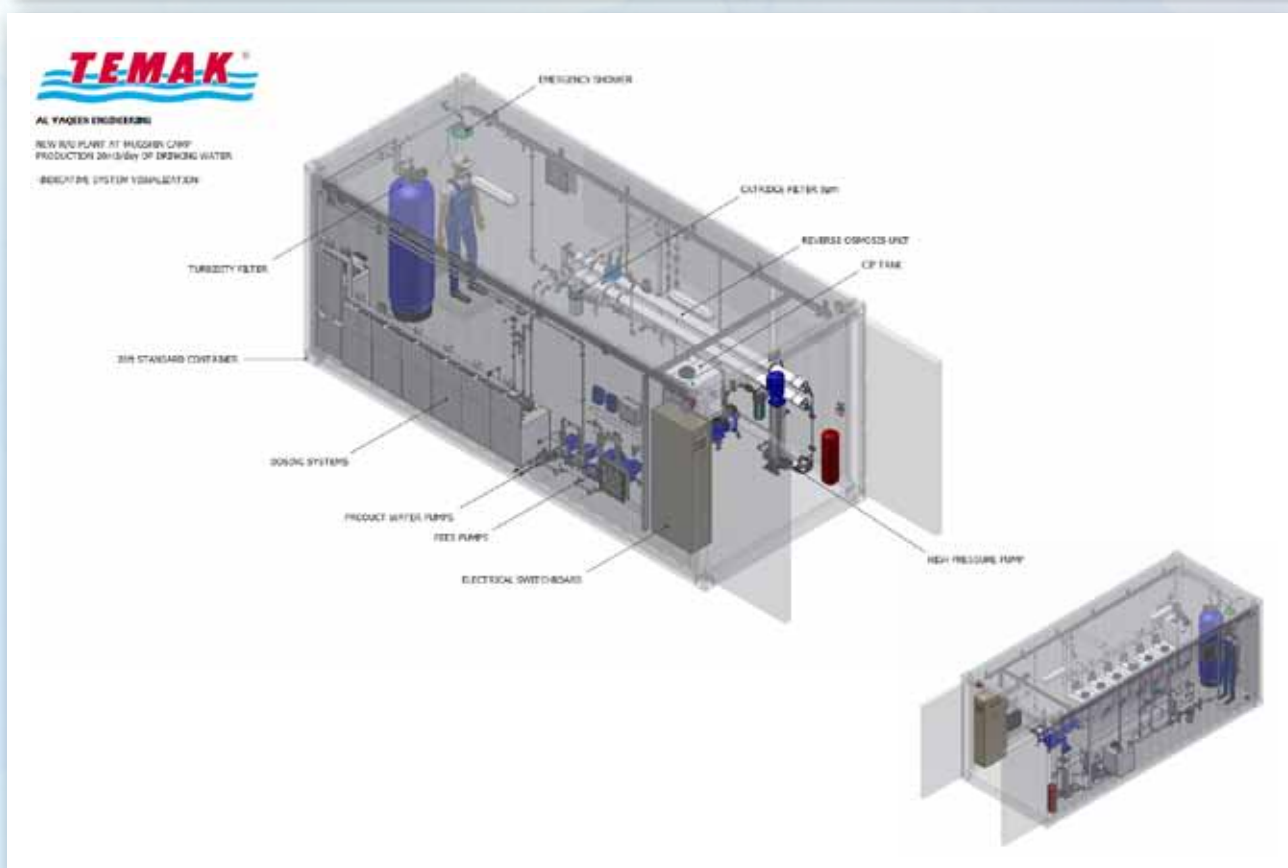
Country	Oman
Client	Ministry
Daily Capacity	500 m³
Raw Water	TDS=2,500 ppm
Product water quality	Potable water according to Omani Standards



Oman: MITAN / ANDAT/ MUGSHIN Containerized desalination plants

TEMAK was assigned with a second important project for a Ministry in Oman. The project involves the manufacturing of 3nos. Containerized heavy brackish reverse osmosis units to produce drinking water according to Omani standards, in the locations of MITAN, ANDAT and RAMLAT MUGSHIN. The source of water is from bore holes, specifically there was a case of H₂S, which requires special care in the design, in order to ensure the protection of the membranes downstream and its complete removal from the product water.

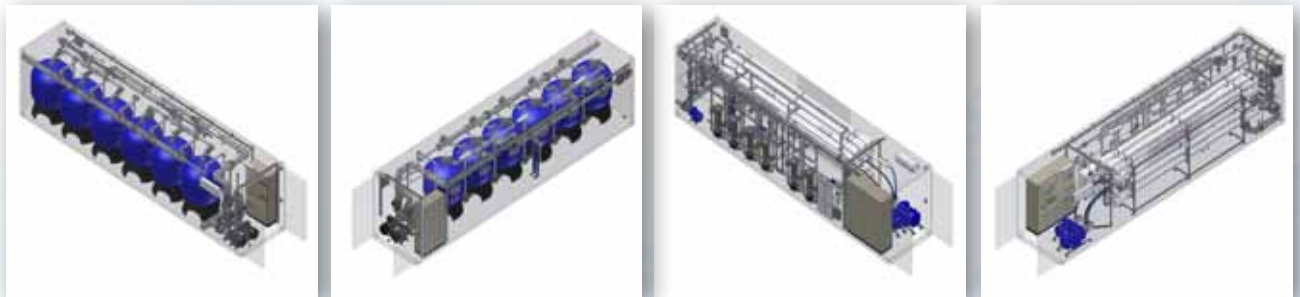
Country	Oman
End User	Ministry
MITAN	
Daily Capacity	30 m ³
Raw Water	2,500ppm
Quality of Product water	Potable water according to Omani Standards
ANDAT	
Daily Capacity	30 m ³
Raw Water	2,500 ppm
Quality of Product water	Potable water according to Omani Standards
MUGSHIN	
Daily Capacity	20 m ³
Raw Water	10,000 ppm
Quality of Product water	Potable water according to Omani Standards



Desalination in Kuwait: 2,400m³/day water suitable for irrigation from heavy brackish water treatment. System designed for sea water with TDS=40,000ppm.

TEMAK manufactured and delivered a seawater desalination system producing 2,400m³/day. The system is designed for seawater salinity 40,000 ppm, when actually, the incoming water from boreholes is heavy brackish and after treatment will be suitable for gardens' irrigation. The system is assembled and installed in three containers of 40 feet High cube each and is fitted with an energy recovery system with pressure exchanger.

Country	Kuwait
Client	AL SALEM CULTURAL CENTER
Daily capacity	2,400m³
Feed water	Heavy brackish (Design for sea water 40,000 ppm)
Product water quality	Suitable for irrigation



Hotel Projects

Hotels in Crete

In 2015 two water treatment systems were manufactured and installed in two large hotels in Crete, in order to cover the needs of the hotels.

Country	Greece
Client	ATLANTIKA HOTELS & RESORT MARINA ZEUS
Daily capacity	350 m³/day
Feed water	Brackish
Product water quality	Drinking



Country	Greece
Client	BLUE SEA
Daily capacity	400 m³/day
Feed water	Brackish
Product water quality	Drinking



TEMAK MED

Modern Medical water treatment Systems

TEMAK having undertaken the commitment and responsibility to provide patients with high quality water for renal Dialysis, continues through research and innovation to further develop the water treatment system TEMAK MED, contributing thus in the improvement of patients' health.

The latest technology, «smart» design of TEMAK MED results in a system that is user-friendly and easy to service, while providing a sophisticated new generation system to the patients. 🌊



Dialysis Unit Athens Naval Hospital

In March 2015 we installed successfully the new water treatment system of the Hemodialysis unit in ANH. The procurement process was conducted through a Public tender and concerned the supply and installation of a complete water treatment system for producing water suitable for hemodialysis.

The system consists of the pre-treatment with double turbidity filters, active carbon filters, a twin softening unit, the main treatment of a double pass reverse osmosis, which produces 0.58m³/h of water suitable for dialysis. The final deionized water, after passing through a UV sterilizing apparatus and a microbial filter, is then driven online to the dialysis machines. 🌊

Country/City	Greece/Athens
Client	Athens Naval Hospital
Hourly production	0.58 m³/h
Feed water	City supply
Product water quality	TDS < 3 ppm



Kidney Dialysis Unit Nefroxenia

In October 2015 we installed successfully a water treatment system in the new KDU named Nefroxenia Holiday Dialysis Centre SA in Mournies Chania. The system is designed to operate on line and consists of double turbidity filters, active carbon filters, a twin softening unit and a double pass reverse osmosis unit which produces 1.6m³/h of water suitable for on line dialysis.

Country/City	Greece/Chania
Client	Nefroxenia Holiday Dialysis Centre SA
Hourly production	1.6 m ³ /h
Feed water	City supply
Product water quality	TDS < 3 ppm



KDU Agios Panteleimon

In December 2015 we delivered successfully a water treatment system to the new KDU named MCHA Agios Panteleimon Ltd in Piraeus. The system is designed to operate online and consists of double turbidity filters, active carbon filters, a twin softening unit and a double pass reverse osmosis unit, which produces 1.28m³/h of water suitable for on line dialysis

Country/City	Greece/Keratsini
Client	Agios Panteleimon
Hourly production	1.28 m ³ /h
Feed water	City supply
Product water quality	TDS < 3 ppm

KDU in the Filiates Hospital

In November 2015 we successfully installed a new water treatment system in the Hemodialysis Unit of the Hospital of Filiates. The system consists of double turbidity filters, active carbon filters, a twin softening unit and a double pass reverse osmosis unit, which produce 0.58m³/h of water suitable for hemodialysis. The final deionized water is stored in the deionised water tank and is driven by a pump, after passing through a UV sterilization device and a microbial filter, to the KDU machines.

Country/City	Greece/Filiates
Client	FILIATES HOSPITAL
Hourly production	0.58 m³/h
Feed water	City supply
Product water quality	TDS < 3 ppm

KDU NEFROLOGY CENTRE PIRAEUS

In October 2015 we installed successfully a water treatment system in the KDU of the Nephrology CENTRE LTD in Piraeus on behalf of the company ARITI SA.

The system is designed to operate online and consists of double turbidity filters, activated carbon filters, a twin softening system and a double pass reverse osmosis unit, which produces 2.10m³/h of water suitable for dialysis and is among the largest systems in production operating in Athens, able to support on line simultaneously 45 dialysis beds

Country/City	Greece/Piraeus
Client	ARITI SA
Hourly production	2.1 m³/h
Feed water	City supply
Product water quality	TDS < 3 ppm



International standards certifications: *OHSAS and CE Medical*

The primary goal of our company is to provide products that meet the needs and expectations of our customers with the same consistency that we do up to this day, having established and maintaining a Quality Management System complying with the International Standard EN ISO 9001, 2000.

Furthermore, since 2011, our Company is committed to the continuous effort to satisfy our customers' increasing demands, improving our environmental performance in all the activities of Study and Design, Development, Production, Storage, Sale, Installation and Support our Water Treatment Systems, Chemical and Industrial Equipment as well as in the field of Water Treatment Systems Operations, establishing and maintaining an Environmental Management System complying with the International Standard EN ISO 14001.

Additionally in 2015, recognizing that the Health and Safety in the workplace is a major concern for all of us and committing to ensure the continuous improvement of our performance, we established the Health and Safety Management System, under the international standard OHSAS 18001.

This cycle is completed for the time being with the certification that we establish and implement a quality assurance system in accordance with the requirements of Directive 93/42 / EEC, Annex V and its integration into Greek law for the construction and final inspection systems Water Cleansing Production and Dilution Dialysis solutions, marked by CE 0653. ☰



OUR PARTNERS' NETWORK CONTINUES TO DEVELOP

*Shops at
32 locations in 2015*

Our Company, with the development culture and openness that distinguishes it, continues to develop its network of partners in more locations. Specifically, in 2015 we equipped shops with TEMAK water treatment products in Mykonos, Rhodes and Kalamata .

In this way, our customers can be informed about our water treatment products, purchase them directly and also get technical support by our trusted partners. Our goal is to expand our partners' network to cover even more areas. ☰



TEMAK took part successfully in WaterEX World Expo, 28–31 January, in Mumbai, India

TEMAK participated in one of the most famous and specialized exhibitions in India that took place at the Exhibition Centre in Mumbai, India.

We had the pleasure and opportunity to learn of new technologies and meet with people and companies with excellent knowledge in water treatment, just as we are.

It is impressive to see how TEMAK's excellent reputation drove many of the visitors to pass by our stand to exchange views and ideas with our experts in the water treatment. ☺



Successful also in 2015 was **TEMAK's** participation in WETEX

The exhibition WETEX 2015 conducted April 21-23 2015 in Dubai. A number of visitors also this year sought and visited our booth.

H WETEX, as the largest exhibition in Water, Energy Technology and Environment attracted exhibitors of the biggest companies specialized in these fields, and visitors whose main interest is the water treatment and the protection and preservation of the environment.

In a specially designed stand TEMAK, experienced staff welcomed the guests and highlighted / presented integrated solutions to sea and brackish water treatment systems for applications such as industry, hospitals, power. ☰

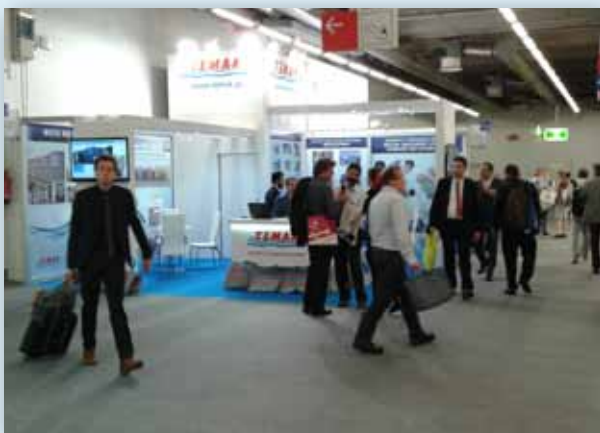


TEMAK was present at the exhibition ACHEMA, from 15–19 June 2015 in Frankfurt

A number of visitors this year also passed by TEMAK stand, visitors from all over the world looking for products, solutions and services for the water treatment industry.

New ideas, new products and solutions were presented in the areas of research, engineering, chemical laboratory, technical analysis, mechanical and thermal process, pumps, valves, pharmaceutical, packaging and storage, instruments and automation systems.

In a specially designed stand TEMAK's experienced staff welcomed the guests and highlighted / presented complete solutions for seawater and brackish water treatment systems for applications in industry, power stations, pharmaceuticals and hospitals. ACHEMA is one of the largest exhibitions in the field of Industry, held every three years in Frankfurt and TEMAK was the only Greek company in water treatment which participated in it for the 2nd time in a row. 🇬🇷

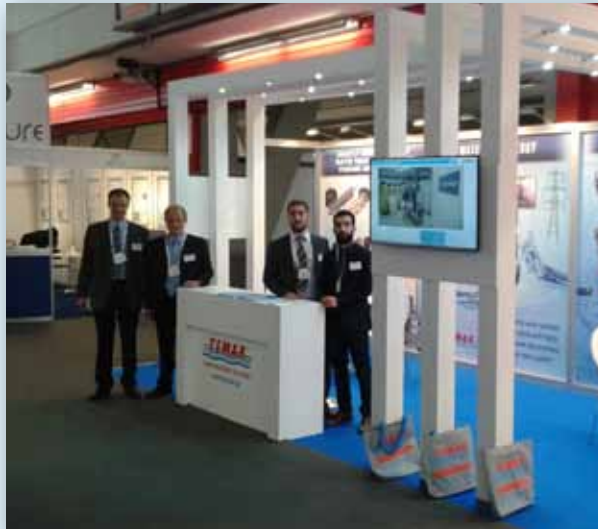


TEMAK participated in the exhibition AQUATECH AMSTERDAM

At the exhibition AQUATECH AMSTERDAM, which took place from 3-6 November in RAI Amsterdam, a lot of visitors sought and visited our booth.

AQUATECH AMSTERDAM, as the largest event of Water, Energy Technology and Environment attracted exhibitors of the biggest companies specialized in these fields, and visitors, whose main interest is the water treatment and the protection and preservation of the environment.

In a well designed stand TEMAK's experienced staff welcomed the guests and highlighted / presented integrated solutions about sea and brackish water treatment systems for applications such as the industry, the hospitals and the power stations. 🌊



Corporate social responsibility

Corporate development strategy driven by the welfare of workers and collaborators

Saying goodbye to 2015, we are all certain that we bid farewell to a very difficult year.

The economic and political circumstances, led to an even greater downturn of the market, which was already facing big and difficult problems. In this great crisis, TEMAK, staunchly defended, the principles and values, which are easily followed in good times, but with great effort maintained in difficult times.

With a sense of responsibility deriving from a presence in the market for over forty years:

Invested in personnel, upkeeping the working conditions required to ensure the safety and quality of life of personnel.

Created new jobs, giving the opportunity to young people who want to create and progress, to do so.

Showed a **strong presence** in the Greek and international markets, seeking new avenues for growth and created new partnerships within and outside Greece.

Participated in research and academic programs, seeking innovative, environmentally friendly solutions and energy saving technologies.

Ensured the quality of the water treatment systems, once again, gaining certifications for their study, design, installation, operation and support and managing to improve continuously.

Supported the customers, every day of the year, with the intervention of the technicians and the response of the support department.

Tested on new partnerships, on entirely new places and new customers and managed, with the help of the sales, design and planning departments, to respond to demands by countries, such as Kuwait, Oman, Saudi Arabia, Egypt, Tunisia, etc. Finally, the company TEMAK following the demands of time and market, decided to proceed with the creation and development of an **electronic shop**, which is scheduled for completion in the first half of 2016. ≡





Wishes you
a Happy & Creative New
Year, With health
and happiness!!!

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